

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P182453

Luminaire Tested: **LDSQA4A18940D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26785)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18940D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2045.0 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.49
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

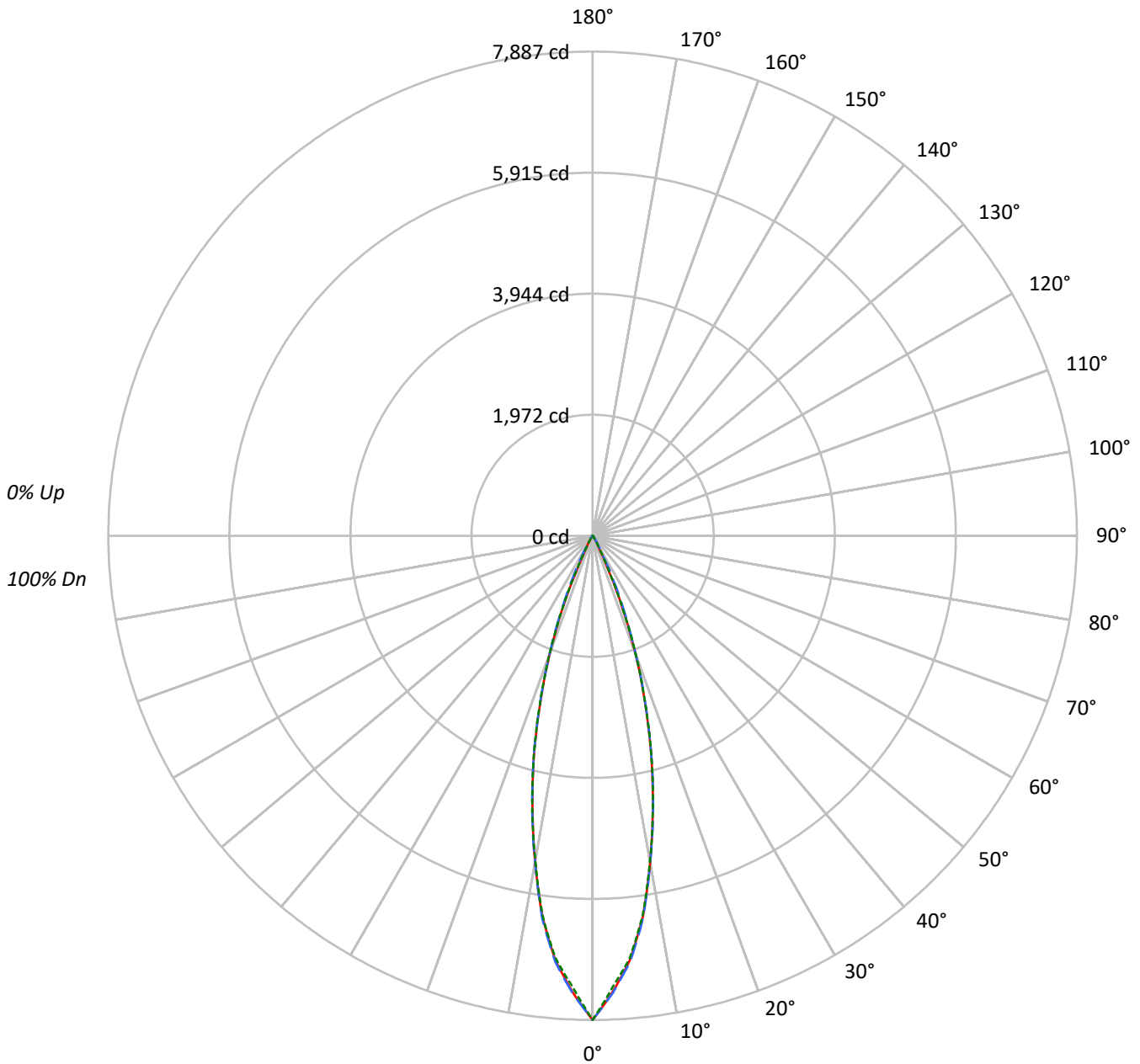
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	97	97	96	95	93															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	95	93	91	90															
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90	95	93	91	90															
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	92	90	88	87															
5	101	95	91	88	100	94	90	88	93	89	87	91	88	86	90	87	85	84	90	87	85	84															
6	98	92	88	84	97	91	87	84	90	86	84	88	85	83	87	85	83	82	87	85	83	82															
7	95	89	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79	85	82	80	79															
8	92	86	82	79	91	85	81	79	84	81	78	84	80	78	83	80	78	77	83	80	78	77															
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75	74	80	78	75	74															
10	87	81	77	74	87	80	76	74	80	76	74	79	76	73	78	75	73	72	78	75	73	72															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	764037	764037	764037
5°	675370	677684	671947
10°	530824	531433	529171
15°	369519	370582	370843
20°	209629	210989	211711
25°	56502	85512	63568
30°	13994	19117	14385
35°	4163	8751	4482
40°	1669	2896	1669
45°	849	1206	726
50°	527	527	271
55°	439	304	152
60°	349	174	174
65°	206	206	206
70°	255	255	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	618.7	30.3
10°-20°	1006.2	49.2
20°-30°	374.0	18.3
30°-40°	37.1	1.8
40°-50°	6.2	0.3
50°-60°	1.7	0.1
60°-70°	0.9	0.0
70°-80°	0.2	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1998.9	97.7
0°-40°	2036.0	99.6
0°-60°	2044.0	99.9
0°-90°	2045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2045.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7887	7887	7887	7887	7887	
5°	6945	7015	6969	7051	6910	615
15°	3684	3726	3695	3756	3698	997
25°	529	776	800	747	595	330
35°	35	44	74	46	38	28
45°	6	7	9	7	5	5
55°	3	2	2	2	1	2
65°	1	1	1	1	1	1
75°	0	1	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7886.8	7886.8	7886.8	7886.8	7886.8
2.5°	7442.8	7482.4	7457.7	7523.8	7364.4
5°	6945.0	7014.6	6968.8	7050.7	6909.8
7.5°	6261.3	6333.6	6286.9	6366.2	6240.2
10°	5396.2	5449.9	5402.4	5479.0	5379.4
12.5°	4531.0	4584.8	4549.5	4620.0	4540.7
15°	3684.4	3725.8	3695.0	3755.7	3697.6
17.5°	2824.5	2864.2	2836.0	2885.3	2841.3
20°	2033.4	2067.7	2046.6	2088.0	2053.6
22.5°	1262.5	1354.1	1369.1	1372.6	1273.1
25°	528.6	776.2	800.0	747.1	594.7
27.5°	217.6	285.4	380.6	300.4	229.1
30°	125.1	145.4	170.9	149.8	128.6
32.5°	62.6	81.1	111.9	85.5	66.1
35°	35.2	44.1	74.0	45.8	37.9
37.5°	21.1	25.5	37.0	26.4	22.0
40°	13.2	15.9	22.9	16.7	13.2
42.5°	8.8	10.6	14.1	10.6	8.8
45°	6.2	7.0	8.8	7.0	5.3
47.5°	4.4	4.4	5.3	4.4	3.5
50°	3.5	3.5	3.5	2.6	1.8
52.5°	2.6	2.6	2.6	1.8	1.8
55°	2.6	1.8	1.8	1.8	0.9
57.5°	1.8	1.8	1.8	0.9	0.9
60°	1.8	1.8	0.9	0.9	0.9
62.5°	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.9	0.9	0.9
67.5°	0.9	0.9	0.9	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.9	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)